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Voting Systems In Agricultural Cooperatives

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Research
Report 2

Preface

This report is a product of a research project jointly funded by Economics, Statistics, and Cooperatives Service (formerly Farmer Cooperative Service) and the Texas Agricultural Experiment Station (Research Agreement 12-04-04-2524). Under the agreement, data on voting methods in agricultural cooperatives were collected. Specifically, the data related to three questions: (1) How many votes do members have in elections for board of directors? (2) Do members vote for directors or for delegates? (3) Is voting at-large or by districts?

Due to the primary objective of the research agreement, data concerning some facets of membership voting were not specifically sought. For example, this report does not discuss voter eligibility, nominating procedure, voting by mail, proxy voting, voter participation, and plurality for electing board members. Though relevant, these questions were outside the scope of this study.

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Voting Systems In Agricultural Cooperatives

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Cooperative Principle And Policy Issue

In a recent textbook on cooperatives, Martin Abrahamsen stated, "Rochdale principles are accepted by many people as the distinguishing trademark of cooperative business."² One of the cooperative principles credited to the Rochdale Society, a group of persons who pioneered cooperatives in England in 1844, specifies one-member, one-vote government of the cooperative. Since then, and particularly in the modern economic system setting, national and international cooperative leaders have debated the relevancy of the one-member, one-vote principle to cooperatives.

The International Cooperative Alliance's Commission on Cooperative Principles considered the Rochdale principles as they pertain to cooperatives today.³ The commission stressed the importance of democratic control by members. But the commission also recognized that voting systems may have to be adapted to account for size and complexity of cooperatives and for current

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²Martin A. Abrahamsen, *Cooperative Business Enterprise*, New York: McGraw-Hill Book Company, 1976, p. 48.

³International Cooperative Alliance, *Report of the I.C.A. Commission on Cooperative Principles*, London, 1966.

economic environment. Thus, the commission recognized importance of one-member, one-vote governing of cooperatives under certain conditions but acknowledged the possibility—and even desirability—of other voting methods for cooperatives having other conditions.

Enabling legislation for agricultural cooperatives in the United States, the Capper-Volstead Act of 1922, does not require voting on the basis of one-member, one-vote. The Act gives associations of producers of agricultural products a choice; they must either: “conform to one or both of the following requirements. First, that no member of the association is allowed more than one vote because of the amount of stock or membership capital he may own herein, or, second, that the association does not pay dividends on stock or membership capital in excess of 8 percent per annum.”⁴

Cooperative incorporation statutes in about 50 percent of the States require cooperative members to vote on a one-member, one-vote basis.⁵ In about 17 percent of the States, statutes allow individual cooperatives to determine the method of voting in their articles of incorporation or bylaws, but the statutes do not specify alternate voting methods. The remaining States, about 33 percent, specify alternate voting methods to the one-member, one-vote method. Examples include: (1) Proportional voting on the basis of actual, estimated, or potential patronage; (2) number of cooperative members (in the case of federated cooperatives); (3) one vote for each director being elected; and (4) proportional voting based on stock held in the cooperative.

Study Objectives

One reason for the importance of voting in cooperatives is that it is part of a broader issue, that of member control. A 1974 report issued by a “public interest” group in Washington, D.C., questioned whether cooperative members control their off-farm businesses.⁶ There are several aspects to the complex member control issue. One is how members vote for their representatives,

⁴Capper-Volstead Act, approved, February 18, 1922, (42 Stat. 388) 7 U.S.C.A., 291-2.

⁵James R. Baarda, *State Cooperative Incorporation Statutes*, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture, forthcoming research report. Cooperative incorporation statutes exclude general incorporation statutes.

⁶Linda Kravitz, *Who's Minding the Co-op?* Washington: Agribusiness Accountability Project, March 1974.

the board of directors, who determine cooperative business policies and hire and supervise cooperative management. Membership voting varies by the number of votes per member, whether members vote directly for directors or for delegates who vote for directors, and whether voting is at-large or by districts; among other things. This report focuses on those aspects of voting.

This report resulted from a research effort concerned primarily with another policy issue related to member control—the extent to which corporations are members of a cooperative or serve on a cooperative's board of directors or executive committee.⁷

Objectives of this portion of that study were to determine: (1) How many votes members have in elections for board of directors; (2) whether members vote for directors or for delegates; and (3) whether voting is at-large or by districts. Voting was examined by commodity handled by the cooperative, geographic area where it was located, its organizational structure, primary function of the cooperative, and cooperative size.

Procedure

Methodology for the larger study is presented in part here, but it is described fully in another research publication (see footnote 7). Primary data were collected through a two-stage mail survey of agricultural cooperatives in the United States from October 1976 to January 1977. The survey included 120 larger regional cooperatives and a stratified random sample of all remaining cooperatives in the population maintained by the Economics, Statistics, and Cooperatives Service. For the sample, cooperatives were stratified by primary commodity handled, organizational structure, and geographic area where the cooperative is headquartered.⁸

Cooperatives were categorized into 10 commodity groups, depending upon the commodity accounting for the largest proportion of total business volume for each cooperative. Commodity groups in this study were: (1) Cotton; (2) dairy—

⁷Vernon E. Schneider, Clement E. Ward, and Ramon Lopez, *Corporation Involvement in Agricultural Cooperatives*, College Station, Texas: Texas Agricultural Experiment Station Bulletin, 1978.

⁸Rudolf Freund, Professor, Institute of Statistics, Texas A&M University, assisted in developing the sample design for this study.

including dairy products; (3) fruits and vegetables—including dry beans and peas, and nuts; (4) grains; (5) livestock—including wool and mohair; (6) poultry—including poultry products; (7) rice; (8) sugar—including honey; (9) other commodities—including tobacco, hay, seeds, bulbs, Christmas trees, roses, hops, coffee, and forest products; and (10) farm supplies—including related services.

Organizational structures were: (1) Local and (2) regional. Local cooperatives serve members in a local area or community, a county, or even several counties. Regional cooperatives serve areas ranging from several counties to a number of States.

Each cooperative was assigned a geographic area according to headquarter location. The areas were: (1) Pacific; (2) Intermountain; (3) Great Plains; (4) Southeast; (5) North Central; and (6) Northeast.

The issue of corporation involvement in cooperatives was believed to be related primarily to cooperative size and commodities handled. Therefore, 120 of the largest regional cooperatives based on their dollar volume of business in fiscal year 1975-76 were selected and sampled at a 100 percent rate.

A commodity-structure-area matrix was developed for the remaining cooperative population. Cooperatives in commodity groups were evaluated and divided into groups, depending on the expected incidence of corporation involvement among cooperatives handling that commodity. From the commodity groups where cooperatives were expected to have higher incidence of corporation involvement, a sample of 150 cooperatives was drawn at random; from commodity groups where cooperatives were expected to have a lower incidence, a sample of 75 cooperatives were drawn at random; and from commodity groups having fewer than 75 cooperatives, all cooperatives were surveyed. At least 2 cooperatives were randomly selected from each cell of the commodity-structure-area matrix whenever possible. This sample design resulted in a sample of 873 cooperatives in addition to the top 120.

Questions concerning how members vote for directors were included in the first stage questionnaire, which was sent to the sample and the top 120 group for a total of 993 cooperatives. Stage one also included questions on organizational structure (in more detail than simply local vs. regional) and financial information.

For each stage of the survey, two followup letters were sent to nonrespondents. Additional phone calls were made to verify data.

Response rate for stage one of the survey was 92.5 percent for the larger 120 cooperatives (111 of 120 cooperatives), referred to as *the top 120*, and 67.8 percent of the sampled group (592 of 873 cooperatives), referred to as *the sample*. Tables 1 and 2 show the response by commodity and area, respectively.

This report limits the discussion to the findings of the survey. No statistical inferences should be drawn for the

Table 1—Survey response for Stage I, from cooperatives included in the sample and the top 120, by commodity.

Commodity	Sample			Top 120		
	Co-ops surveyed	Co-ops responding	Response rate	Co-ops surveyed	Co-ops responding	Response rate
	--- Number ---		Percent	--- Number ---		Percent
Cotton	150	102	68.0	6	6	100.0
Dairy	150	95	63.3	26	23	88.5
Fruits and vegetables	150	112	74.7	23	20	86.9
Grain	75	49	65.3	17	17	100.0
Livestock	74	37	50.0	14	13	92.9
Poultry	32	21	65.6	3	2	66.7
Rice	52	40	76.9	2	2	100.0
Sugar	53	35	66.0	3	3	100.0
Other commodities	62	47	75.8	2	2	100.0
Farm supplies	75	54	72.0	24	23	95.8
Total	873	592	67.8	120	111	92.5

Table 2—Survey response for Stage I, from cooperatives included in the sample and the top 120, by area.

Commodity	Sample			Top 120		
	Co-ops surveyed	Co-ops responding	Response rate	Co-ops surveyed	Co-ops responding	Response rate
	--- Number ---		Percent	--- Number ---		Percent
Pacific	127	102	80.3	29	24	82.8
Intermountain	73	52	71.2	6	5	83.3
Great Plains	202	146	72.3	12	12	100.0
Southeast	162	103	63.6	22	20	90.9
North Central	233	142	60.9	41	40	97.6
Northeast	76	47	61.8	10	10	100.0
Total	873	592	67.8	120	111	92.5

population of cooperatives from these results, even though the sample design was intended to represent the population of agricultural cooperatives in the United States.

Composite Voting Systems

This section considers combinations of the three voting components for which data were collected. For each of four voting methods (methods in the category "other methods" included variations and combinations of the first three methods) there are 4 combinations of direct vs. delegate voting and at-large or district voting. Therefore, 16 possible combinations resulted. Table 3 lists all combinations, their frequency, and rank in terms of frequency for both the sample and top 120 groups. Each group (sample and top 120) is discussed separately and *reported* figures refer to table 3.

Sample

Most cooperatives use a voting system based on one-member, one-vote. Of the 506 cooperatives for which a composite system could be identified, 467 or 92.3 used the one-member, one-vote system. Members of 503 or 99.4 percent of all cooperatives vote for directors rather than delegates and members of 431 or 85.2 percent vote at-large rather than by districts.

Members of 464 cooperatives using one-member, one-vote voted directly for directors. Members also voted at-large in 406 of the 467 cooperatives using one-member, one-vote.

The two most frequently found voting systems used by cooperatives are based on one-member, one-vote. With their proportion of total cooperatives, those are: One-member, one-vote, direct, at-large—405 or 80.0 percent; and one-member, one-vote, direct, districts—59 or 11.7 percent. Thus, 91.7 percent of all cooperatives in the sample use one of two voting systems.

Members of cooperatives with the most popular voting system (one-member, one-vote; direct; at-large) have equal voting power regardless of how much they use the cooperative, how long they have been a member and used it over time, or how large the cooperative is in terms of number of members or business volume. In the second most often found system (one-member, one-vote; direct; districts), members have equal voting power within districts but not necessarily among districts.

Three cooperatives have a system based on one-member, one-vote and use delegates, but members in one cooperative vote at-large; and in the other two, by districts. In the system where at-

Table 3—Number of cooperatives and rank by frequency for each voting system combination.

Voting system	Sample		Top 120	
	Number of cooperatives reporting	Rank (by frequency)	Number of cooperatives reporting	Rank (by frequency)
One-member, one-vote; direct; at-large	405	1	16	2(tie)
One-member, one-vote; direct; districts	59	2	36	1
One-member, one-vote; delegates; at-large	1	9(tie)	3	7(tie)
One-member, one-vote; delegates; districts	2	8	16	2(tie)
Proportional-patronage; direct; at-large	10	4(tie)	7	4
Proportional-patronage; direct; districts	10	4(tie)	5	5
Proportional-patronage; delegates; at-large	0	-	0	-
Proportional-patronage; delegates; districts	0	-	1	11(tie)
Proportional-equity capital; direct; at-large	11	3	4	6
Proportional-equity capital; direct; districts	3	7	2	9(tie)
Proportional-equity capital; delegates; at-large	0	-	0	-
Proportional-equity capital; delegates; districts	0	-	1	11(tie)
Other methods; direct; at-large	4	6	3	7(tie)
Other methods; direct; districts	1	9(tie)	1	11(tie)
Other methods; delegates; at-large	0	-	2	11(tie)
Other methods; delegates; districts	0	-	2	9(tie)
Total	506	-	98	-

large voting is used, members have equal voting power in voting for delegates but delegates may not equally represent members. In the cooperative using districts, members have equal voting power within but not necessarily between districts, and again, delegates may not equally represent members.

In the sample, only two voting systems based voting on a member's business with the cooperative as a percent of total cooperative business (proportional based on patronage). Twenty cooperatives or 4 percent of all cooperatives used those systems. Ten cooperatives each had one of the two systems: proportional based on patronage; direct; at-large; and proportional based on patronage; direct; districts. In all 20 cooperatives, members vote for directors rather than delegates.

Proportional voting based on patronage gives more voting power to members who use their cooperative more and can be an advantage to members with larger farming operations. After the voting proportion has been computed for each member, direct voting at-large prevents any further shifting of voting power. When voting is based on patronage and is by districts, the districting process may redistribute voting power, though not necessarily.

Two systems that base voting on each member's proportion of total equity capital were found (proportional based on equity capital). Fourteen cooperatives or 2.8 percent of all cooperatives based voting on equity capital. Members voted directly for directors in all 14 cooperatives, and at-large voting was used in 11 of the 14.

One of the two equity capital based systems was the third most commonly found system in the sample (proportional based on equity capital; direct; at-large). Proportional voting on the basis of equity gives greater voting power to those members having a larger share of the ownership in the cooperative. It may give older members of the cooperative or those that have used their cooperative over a long period of time additional voting power compared to younger members. That may mean more control could rest with members that currently use their cooperative less, depending on the equity retirement system in the cooperative and other factors.

Again, voting directly for directors and at-large has no further effect on distribution of voting power. Districting, however,

again influences voting power and may alter the effects resulting from voting on the basis of equity capital.

Five cooperatives or 1 percent of all cooperatives base voting on some other method. Members of all 5 vote directly for directors and in 4 of the 5 voting is at-large. Modifications or combinations of the three primary voting methods (one-member, one-vote; proportional based on patronage; and proportional based on equity capital) would have to be analyzed individually to determine the distribution of voting power among members.

Top 120

Voting based on one-member, one-vote was most often found among cooperatives in the top 120. In fact, three of the most popular systems were in the one-member, one-vote group. Members of 71 or 72.4 percent of the 98 cooperatives for which composite voting systems could be identified voted according to one-member, one-vote. Of the 98 cooperatives, members of 74 or 75.5 percent voted for directors rather than delegates, and 34 or 34.7 percent vote at-large.

The most frequently found voting system (one-member, one-vote; direct; districts) was used by 36 cooperatives. Two systems (one-member, one-vote; direct; at-large; and one-member, one-vote; delegates; districts) were tied for second with 16 cooperatives using each system. Thus, in 52 cooperatives in the one-member, one-vote group, members vote directly for directors; and 52 cooperatives also used a district system.

As mentioned earlier, each member in the one-member, one-vote; direct; at-large system (tied for second most frequently used) has equal voting power. The most frequently found system substitutes district voting for at-large voting. With that system, members have equal voting power within districts but not necessarily among districts, depending on how districting is accomplished. In the one-member, one-vote; delegates; at-large system all members have equal voting power in electing delegates but delegate voting power may not be equal, depending on the basis for delegate voting. If delegates vote according to the number of members, their voting power is equal but if their votes are on some proportional basis, voting power is unequal. In the other system tied for second most frequently used (one-member, one-vote; delegates; districts) voting power is equal for members within districts in voting for delegates but not necessarily among districts nor among delegates.

Thirteen cooperatives reported using proportional voting on the basis of patronage or 13.3 percent of all cooperatives in the top 120. Members in 12 of those, voted directly for directors and in 7 of the 13 members voted at-large. Patronage voting gives current users (patrons) more voting power but in the most popular of the patronage based system (proportional based on patronage; direct; at-large) the last two components do not further alter member voting power. Substituting district voting for at-large may alter voting power depending on how districts are chosen. The effects may magnify or dilute other members' power. The effects of a voting system on members are more difficult to determine when voting is based on patronage; by delegates; and by districts. Voting power then depends on all 3 components of the system and each may increase the variance of voting power among members.

Voting was based on equity capital in 7 cooperatives or 7.1 percent of those in the top 120 group. Members of 6 of the 7 voted directly for directors and 4 voted at-large. In the most popular of equity capital based systems (proportional based on equity capital; direct; at-large), voting power is distributed according to a member's equity capital in the cooperative but is not further altered because voting is direct and at-large. Districting, again, may change the distribution of voting power depending on the districting system, and changing to a delegate system may further change voting power.

Seven cooperatives or 7.1 percent base voting on some other voting method. In four cooperatives voting is directly for directors and in four, voting is at-large. Again, an analysis of voting power depends largely on the combination of voting methods so little can be said regarding these systems. Direct voting maintains whatever voting power distribution results from the voting method within districts, or throughout the cooperative if districts are not used. Delegate voting, however, may alter voting power within and among districts, and throughout the cooperative if districting is not used.

System Components

This section reports on components of the composite systems discussed in the previous section. Specifically, this section focuses on the number of votes allowed per member, whether voting is for directors or for delegates, and whether voting is at-large or by districts.

Voting Methods

Sample

Members of 497 cooperatives, or 92.6 percent of those responding to this question, vote for directors or delegates on the basis of one-member, one-vote. Members vote on the basis of patronage or the amount of their business conducted with the cooperative in the last fiscal year in 20 cooperatives or 3.7 percent of the total. In 14 cooperatives, or 2.6 percent of the total, voting was based on the proportion of equity capital a member had in the cooperative relative to total equity capital. Members of the remaining 6 cooperatives, 1.1 percent of the total, voted by some other method. Other methods are oftentimes combinations of the 3 principle voting methods. Some examples of other voting methods and further discussion of proportional voting are presented in later sections of this report.

Voting was analyzed according to the primary commodity handled by the cooperative (the commodity accounting for the largest proportion of its dollar volume of business). Members vote on the basis of one-member, one-vote in over 92 percent of the cooperatives for 8 of the 10 commodity groups (table 4). The exceptions were other commodities, 88.6 percent, and fruits and vegetables, 77.8 percent. Twelve of the 20 cooperatives that allow voting on the basis of patronage handled fruits and vegetables.

Table 4—Number of cooperatives in the sample reporting how members vote, by commodity.

Commodity	Voting method			
	One-member, one-vote	Proportional based on partonage	proportional based on equity capital	Other
----- Number -----				
Cotton	95	1	0	0
Dairy	83	0	1	0
Fruits and vegetables	77	12	5	5
Grain	47	0	2	0
Livestock	31	2	0	0
Poultry	14	0	1	0
Rice	36	1	0	0
Sugar	28	0	1	0
Other commodities	39	2	2	1
Farm supplies	47	2	2	0
Total	497	20	14	6
Percent of total cooperatives	92.6	3.7	2.6	1.1

Similarly, members of fruits and vegetables cooperatives most often voted according to equity capital in the cooperative or by other methods—5 of 14 and 5 of 6 cooperatives, respectively.

Members of marketing cooperatives (at least 50 percent of their business was from the sale of farm products) voted by nearly the same proportion of methods as when farm supplies cooperatives (at least 50 percent of their business was from the sale of farm supplies) was included. Comparable methods and percentages were: one-member, one-vote, 92.6; proportional based on patronage, 3.7; proportional based on equity capital, 2.5; and other methods, 1.2 percent.

Results of an analysis by geographic area (where each cooperative is headquartered) indicate the high correlation between commodity and area. Members of 75.3 percent of the cooperatives located in the Pacific area vote according to one-member, one-vote. Comparable percentages in the other 5 areas ranged from 92.5 to 100 percent. This was expected due to the number of fruit and vegetable cooperatives in the Pacific area. Three-fourths of the 20 cooperatives using proportional voting based on patronage also were in the Pacific area. One-half of the 14 cooperatives in which voting was based on equity capital were located in the North Central area and another 28.5 percent were in the Pacific area. One-half and one-third of the six cooperatives with some other voting method were in the Pacific and Southeast areas, respectively.

Cooperatives in the sample were asked to categorize themselves as regional cooperatives—either federated, centralized, or mixed—or as local cooperatives. In 226 of the 247 regional cooperatives, 91.5 percent, members voted on the basis of one-member, one-vote (table 5). Fourteen cooperatives, or 5.7 percent, allowed membership voting on the basis of patronage; 5 cooperatives, or 2.0 percent, on the basis of equity capital; and 2 cooperatives, or 0.8 percent, by another method.

Of regional cooperatives, 82.6 percent were centralized, meaning their members were individual farmers. Members of federated regional cooperatives are local cooperative associations. Of all regional cooperatives, 6.5 percent were federated. Mixed cooperatives accounted for 10.9 percent of all regional cooperatives. Mixed cooperatives have both individual farmers as members and local cooperative associations.

Table 5—Number of cooperatives in sample reporting how members vote, by organizational type.

Organizational type	Voting method			
	One-member, one-vote	Proportional based on patronage	Proportional based on equity capital	Other
	----- <i>Number</i> -----			
Regional cooperatives	226	14	5	2
Centralized	192	8	3	1
Federated	13	3	0	0
Mixed	21	3	2	1
Local cooperatives	262	5	9	4
Total	488	19	14	6
Percent of total cooperatives ¹	92.6	3.6	2.6	1.1

¹Sum does not equal 100 due to rounding.

Members of centralized cooperatives vote by one-member, one-vote more than either federated or mixed cooperatives—94.1 percent compared to 81.2 and 77.8 percent, respectively. It is important to note that members of a federated regional cooperative are local cooperative associations. Therefore, membership voting refers to how local cooperatives vote for directors of the regional, not how individual members (farmers) vote for directors of their local cooperative. The same is true for local cooperative members in mixed regionals. Federated cooperatives have proportional voting on the basis of patronage more than other types of regionals, 18.8 percent, compared with 11.1 percent for mixed regionals and 3.9 percent for centralized regionals. Proportional voting on the basis of equity capital was more common in mixed regionals, 7.4 percent, than in centralized cooperatives, 1.5 percent. No federated cooperatives used proportional voting on the basis of equity capital. Two regionals, a centralized and a mixed, have another voting method.

Members of local cooperatives most often vote on the basis of one-member, one-vote. Local cooperatives have individual farmers as members, like centralized regional cooperatives, but serve a smaller geographic area. Members of local cooperatives vote according to one-member, one-vote in 262 or 93.6 percent of the local cooperatives in the sample. Five cooperatives, 1.8 percent, vote according to patronage; 9—or 3.2 percent—according to equity capital; and 4—or 1.4 percent—by another method.

Cooperatives in the sample were grouped into three size categories according to their reported dollar volume of business in fiscal year 1975-76. Size categories were: (1) Less than or equal to \$1 million; (2) more than \$1 million but not exceeding \$5 million; and (3) more than \$5.0 million. Data indicated that as cooperative size increases, the proportion of those cooperatives voting on a one-member, one-vote basis declines. However, the percentage of cooperatives in which members vote on the basis of patronage, equity or some other method is relatively small for each group.

The smallest size category accounted for 177 or 37.2 percent of the 476 cooperatives providing data on their business volume. Members of 174 or 98.3 percent of cooperatives in that group voted according to one-member, one-vote. Voting in the remaining 3 cooperatives was evenly divided among the 3 remaining voting method groups.

Of 172 cooperatives, or 36.1 percent in the medium size group, 91.9 percent used the one-member, one-vote method. Members in 7 cooperatives, or 4.1 percent, voted on the basis of patronage; 4, or 2.3 percent, voted on the basis of equity capital; and 3, or 1.7 percent voted by other methods.

One hundred twenty-seven cooperatives in the sample had a business volume exceeding \$5.0 million, 26.7 percent of all cooperatives. A lower percentage of those used the one-member, one-vote method. Members of 107 or 84.2 percent vote by one-member, one-vote; 9 or 7.1 percent, by patronage; and 9 or 7.1 percent, by equity capital; and 2 or 1.6 percent, by other methods.

Top 120

Members of 79 cooperatives in the top 120 group, 71.8 percent of those responding, vote on the basis of one-member, one-vote. Members of 14 cooperatives or 12.7 percent vote based on their patronage with the cooperative, and 8 or 7.3 percent vote on the basis of their equity capital in the cooperative. Members of the remaining 9 cooperatives or 8.2 percent vote by some other method. Again, other voting methods often were modifications or combinations of the 3 primary methods.

Considerable variation was found among cooperatives handling different commodities (table 6). Members of all 9 cotton, poultry, and other commodities cooperatives vote by one-member, one-vote. At the other extreme, fewer fruits and vegetables cooperatives used one-member, one-vote voting than they did other

Table 6—Number of cooperatives in top 120 reporting how members vote, by commodity.

Commodity	Voting method			
	One-member, one-vote	Proportional based on patronage	Proportional based on equity capital	Other
----- <i>Number</i> -----				
Cotton	6	0	0	0
Dairy	20	0	1	2
Fruits and vegetables	8	9	1	2
Grain	16	0	1	0
Livestock	9	1	0	3
Poultry	1	0	0	0
Rice	1	1	0	0
Sugar	2	1	0	0
Other commodities	2	0	0	0
Farm supplies	14	2	5	2
Total	79	14	8	9
Percent of total cooperatives	71.8	12.7	7.3	8.2

voting methods. Members of 8 fruits and vegetables cooperatives, 40.0 percent of all fruits and vegetables cooperatives, voted on the basis of one-member, one-vote.

Members of 9 other fruits and vegetables cooperatives vote on the basis of patronage. These cooperatives represented 64.3 percent of the 14 cooperatives using patronage voting. Equity capital voting was most common in farm supplies cooperatives. There, members of 5 of the 23 farm supplies cooperatives vote on the basis of equity capital. That represents 62.5 percent of the 8 cooperatives with a voting method based on equity capital.

Excluding farm supplies cooperatives, the percentages of marketing cooperatives using each voting method change very little. The distribution of marketing cooperatives in each voting method are: 65 or 74.7 percent, one-member, one-vote; 12 or 13.8 percent, proportional based on patronage; 3 or 3.5 percent, proportional based on equity capital; and 7 or 8.0 percent, other methods. The only significant change was in cooperatives using an equity capital base for voting where the percentage of marketing cooperatives was reduced compared to the percentage when farm supplies cooperatives were included.

The analysis by geographic area is related to commodity handled. Members of cooperatives located in the Pacific area vote according to one-member, one-vote less than any other area, 50

percent compared to the next lowest group, the North Central, where it was 72.5 percent. The Pacific area reflects the predominance of fruits and vegetables cooperatives. The geographic area-commodity relationship is further evidenced by the fact that 8 of the 14 cooperatives voting according to patronage also were in the Pacific area. Members vote according to equity capital in 4 cooperatives located in the North Central area, 50.0 percent of the 8 cooperatives using that voting method. In 6 other North Central cooperatives, members vote by other methods, two-thirds of all cooperatives using another voting method. This also is correlated to commodity as several farm supplies and grain cooperatives are in the North Central area.

More than half of the cooperatives responding to the question on organizational type, 53.5 percent, classified themselves as centralized cooperatives. Of these, members vote on a one-member, one-vote basis in 42 or 79.2 percent of them; by patronage in 8 or 15.1 percent; and by equity capital and other methods in 3 or 5.7 percent. Mixed cooperatives use one-member, one-vote voting almost as often, in 15 or 78.9 percent of the mixed cooperatives. One mixed cooperative used a patronage based voting method; 2, an equity capital based method; and 1, another method. A lower percentage of federated cooperatives based voting on one-member, one-vote, 17 cooperatives or 63.0 percent of all federated cooperatives. The remaining federated cooperatives were fairly evenly divided among the remaining voting methods; in 3, voting was based on patronage; 4, on equity capital; and 3, other methods.

Cooperatives in the top 120 responding to the survey were divided into 3 size categories: (1) those whose total volume of business was equal to or less than \$100 million; (2) greater than \$100 million but less than or equal to \$500 million; and (3) greater than \$500 million. About one-third of the cooperatives were in the smallest size category, 32.7 percent; one-half in the middle category, 51.0 percent; and one-sixth in the largest group, 16.3 percent.

The proportion of cooperatives in which members vote on a one-member, one-vote basis increased as size increased, from 67.6 to 71.7 to 76.5 percent, respectively, for the 3 size categories of the top 120 group.

The smallest size group had the highest percentage of cooperatives in which members vote by patronage. That amounted to 6 cooperatives and 17.6 percent of all cooperatives compared to 7 cooperatives and 13.2 percent in the middle size category. No

cooperatives in the larger group voted according to patronage.

Members of 3 or 17.6 percent of the largest cooperatives vote according to their equity capital in the cooperative. A smaller percentage of medium-sized cooperatives allowed members to vote on the basis of equity capital, 4 cooperatives or 7.5 percent; and an even smaller percentage of the smallest cooperatives allowed voting according to equity capital, 1 cooperative or 2.9 percent.

The proportion of remaining cooperatives in which members vote by other methods decreased as size increased. For the smallest group there were 4 cooperatives, 11.8 percent of the cooperatives in that size group; 4 or 7.5 percent in the middle-sized category; and 1 or 5.9 percent of the largest cooperatives.

Direct or Delegate Voting

Sample

In direct voting systems members vote for board of directors nominees rather than for delegates who, in turn, vote for director nominees on behalf of members. Direct voting was found to be the most common form of voting by a wide margin. Of the 534 responding cooperatives in the sample, members of 530—or 99.3 percent of the cooperatives—voted directly for directors. Members of only 4 cooperatives—0.7 percent of the total—voted for delegates. A brief discussion of delegate voting is presented in a later section of this report.

The four cooperatives using a delegate system were distributed one per each of four commodity groups: Cotton, dairy, grain, and farm supplies. Considering marketing cooperatives alone (excluding farm supplies cooperatives) percentages are nearly unchanged. Direct voting is used in 480 of 483 cooperatives or 99.4 percent of the total.

Geographically, delegate voting was used by two cooperatives in the Intermountain area, by one in the Southeast, and one in the North Central. Two were federated regionals and two were mixed regionals. No centralized regionals or local cooperatives used a delegate system.

Only 2 of the 4 cooperatives using a delegate system responded to a survey question regarding their annual business volume. Each of the two had a business volume in fiscal year 1975-76 of more than \$1 million and less than \$5 million.

Top 120

Among 109 cooperatives responding in the survey of the top 120 cooperatives, 81—or 74.3 percent—require members to vote directly for directors. The remaining 28—or 25.7 percent—used a delegate system.

By commodity, the percentage of cooperatives using direct voting ranged from 50 percent of livestock and “other commodities” cooperatives to 100 percent of cotton, poultry, rice, and sugar cooperatives. Besides livestock and other commodities cooperatives, members vote for delegates in 39.1 percent of dairy cooperatives, 31.8 percent of farm supplies cooperatives, 15.0 percent of fruits and vegetables cooperatives, and 11.8 percent of grain cooperatives. Dairy cooperatives comprised nearly one-third and farm supplies cooperatives one-fourth of all cooperatives having delegate systems.

Members of 66 of the 87 marketing cooperatives—75.9 percent—vote directly for directors. The remainder vote for delegates.

More than 70 percent of the cooperatives in which members vote directly for directors are in the Pacific, North Central, and Southeast areas. The North Central area accounts for the highest percentage of cooperatives having a delegate system, 36.8 percent. The Intermountain area had no cooperatives that use delegates in voting for directors. Other regions were as follows: Northeast, 3 cooperatives or 30 percent of cooperatives in that area; Great Plains, 3 cooperatives or 25 percent; and Pacific, 2 cooperatives or 8 percent.

There was little difference between direct voting and delegate voting ratios when considering cooperative organizational structures. Members of centralized cooperatives voted directly for directors in 75 percent of those cooperatives. It was 72.2 percent in mixed cooperatives, and 71.4 percent in federated cooperatives.

Members of cooperatives with a 1975-76 fiscal year volume of \$100 million or less and those with a business volume between \$100 million and \$500 million voted directly for directors more often than did members of larger cooperatives. Members vote for directors rather than delegates in 79.4, 78.8, and 52.9 percent of the total cooperatives in each size category. Of all cooperatives with a delegate system, 42.1 percent were in the larger size category.

At-Large or District Voting

Sample

Members of 433 cooperatives or 85.1 percent of the 509 cooperatives responding to this question vote for directors or delegates on an at-large basis. In the remaining 76 cooperatives, or 14.9 percent of the total, members vote for directors or delegates according to districts. (Additional comments on districting are discussed in a later section of this report.)

As a percentage of cooperatives in each commodity group, voting by districts was most common in sugar cooperatives, 39.3 percent of all sugar cooperatives; other commodities cooperatives, 28.6 percent; livestock cooperatives, 22.6 percent; and poultry cooperatives, 20.0 percent (table 7). One-half of all cooperatives reporting the use of districts were in fruits and vegetables, other commodities, and sugar cooperatives. Considering all marketing cooperatives together, the percentages are nearly unchanged from when farm supply cooperatives are included.

Voting at-large or by districts varies relatively little among geographic areas. At-large voting ranged from a low of 78 percent to a high of 91.6 percent in the Intermountain and Great Plains areas, respectively. As a percentage of all cooperatives using a district system, 40 or 52.6 percent were in the North Central and Pacific areas.

Table 7—Number of cooperatives in the sample reporting whether members vote for directors at-large or by districts, by commodity.

Commodity	At-large voting	Voting by districts
----- Number -----		
Cotton	83	6
Dairy	72	5
Fruits and vegetables	81	15
Grain	37	8
Livestock	24	7
Poultry	12	3
Rice	34	2
Sugar	17	11
Other commodities	30	12
Farm supplies	43	7
Total	433	76
Percent of total cooperatives	85.1	14.9

Cooperatives serving members in a wider geographic area might be expected to implement district voting systems more than when they serve members in a smaller area. Data indicated members of local cooperatives vote at-large more often than members of regional cooperatives. Of 263 local cooperatives, 234 or 89.0 percent of them have members vote at-large.

In regional cooperatives, at-large voting is more common in centralized and mixed regionals than in federated regionals. For all regional cooperatives, members vote at-large in 192 of the 237 cooperatives—an 81 percent rate. Federated regionals reported using districts in 6 or 42.8 percent of the 14 federated regional cooperatives. Districting was less common in centralized and mixed regionals. For centralized regional cooperatives, districting was used in 34 of 196 cooperatives or 17.3 percent of them, and for mixed regionals, 5 of 27 or 18.5 percent.

Members in larger cooperatives might be expected to vote by districts more often than members of smaller cooperatives. Data bear that out, though not conclusively. A direct relationship was found between cooperative size and use of districts. Of 169 smaller cooperatives (business volume less than or equal to \$1 million), 15 or 8.9 percent used districts; of 163 cooperatives in the medium size group (business volume greater than \$1 million but not exceeding \$5 million), 17 or 10.4 percent used districts; and of 122 larger cooperatives (business volume exceeding \$5.0 million), 33 or 27.0 percent used districts. Eleven cooperatives reported a business volume above \$50.0 million, and of those 7 or 63.6 percent had a district voting system.

Top 120

Members of cooperatives in the top 120 group vote by districts more than they do at-large. Ten cooperatives indicated their members voted both at-large and by district. Of 100 other cooperatives responding to the question, 65 cooperatives have members vote by districts.

In each commodity group, members of 50 percent or more of the cooperatives vote by districts (table 8). Those commodity groups with the highest percentage of cooperatives using districts were other commodities, 100 percent; cotton, 80.0 percent; livestock, 76.9 percent; and dairy 76.2 percent. Dairy, farm supplies, livestock, and fruits and vegetables cooperatives accounted for 48 or 73.8 percent of all cooperatives having district systems.

Table 8—Number of cooperatives in the sample reporting either voting at-large or by districts, by commodity.¹

Commodity	At-large voting	Voting by districts
----- <i>Number</i> -----		
Cotton	1	4
Dairy	5	16
Fruits and vegetables	7	10
Grain	7	8
Livestock	3	10
Poultry	1	1
Rice	1	1
Sugar	1	1
Other commodities	0	2
Farm supplies	9	12
Total	35	65
Percent of all cooperatives	35.0	65.0

¹Excluded are 10 cooperatives that reported having a combination of at-large voting and voting by districts.

Members of marketing cooperatives vote by districts slightly more than farm supply cooperatives. Therefore, when farm supplies cooperatives are excluded, data show 53 of 79 marketing cooperatives using districts, 67.1 percent of all marketing cooperatives.

Cooperatives in the Great Plains and North Central areas use districts less than other areas, 50.0 and 54.1 percent of cooperatives in each respective area. Members of cooperatives in the Southeast and Intermountain areas vote by districts in 83.3 and 80.0 percent of the cooperatives in those areas, respectively. Of all cooperatives using districts, 35 of the 65 or 53.8 percent of the total were located in the North Central and Southeast areas.

One-half of the federated regional cooperatives use district voting systems less than either of the other two types of regionals. That compares with 70.6 percent of mixed regionals and 79.6 percent of centralized regionals. Of the 64 regional cooperatives with districts, 60.9 percent were centralized and the remaining cooperatives were nearly equally divided between federated and mixed.

Members of cooperatives whose annual business volume was \$100 million or under voted by districts two-thirds of the time. So did members of cooperatives in the \$100-500-million category. Larger cooperatives (annual business volume greater

than \$500.0 million) used voting by districts three-fifths of the time. One-half of the 64 cooperatives in which members vote by districts were those in the middle size category.

Further Discussion Of Components

Previous sections indicated the number of cooperatives in the sample and top 120 in which members vote by various methods, for delegates, and by districts. This section discusses many of the comments respondents in the sample and top 120 made concerning proportional or other voting methods, maximum votes per member or delegate, and how districting is accomplished. The number of comments were insufficient to adequately categorize them into the sample group or top 120 group or by other factors; so they are discussed as one group.

Proportional Voting

Members or their delegates in 34 cooperatives in the sample and 22 cooperatives in the top 120 vote on a proportional basis, either based on patronage or equity. Proportional voting implies members or their delegates can cast more than one vote. It further suggests that those members who use their cooperatives more have greater influence in the governing of the cooperative.

Proportional voting on the basis of patronage may be based on units or dollars. Examples of patronage based on units included: (1) one vote for each acre planted; (2) one vote for each 50 acres planted; (3) one vote for each 5 pounds of product delivered; and (4) one vote per 100 tons of product delivered. Voting on the basis of patronage in the most recent fiscal year keeps cooperative control in the hands of active members and especially those that use the cooperative most. It may benefit members with larger farming operations more than those with smaller operations. Some may argue, however, that patronage-based voting is not necessarily in the best interest of family farmers or that it does not represent democratic control of cooperatives.

One cooperative voting on the basis of tonnage of product delivered limits the number of votes per member to 10. That system enables active members using their cooperative more to have more influence than those who use their cooperative to a lesser extent. However, it places a limit on the voting advantage for members with larger farming operations.

Examples of cooperatives that base patronage on dollar volume include a cooperative that allows members one vote per \$1,000 of product delivered. Two other cooperatives allowed voting according to dollar volume but established a ceiling on the number of votes. Members in one cooperative were allotted one vote per \$5,000 of business with the cooperative up to a maximum of 12 votes per member. In another cooperative, each member casts one vote for each \$500 of business but the member is limited to no more than 3 percent of the total number of votes cast.

As noted earlier, proportional voting may be based on equity capital in the cooperative. In this study, these examples were reported: (1) One vote per \$1 of equity; (2) one vote per \$100 of equity; (3) one vote per \$5,000 of equity; or (4) one vote per one share of stock. Members may be given one vote for each share of stock with stock shares distributed according to patronage with the cooperative. Another cooperative allows members one vote per share of stock but patronage is computed on a 5-year average for stock distribution purposes.

Three cooperatives voting on the basis of equity capital established a ceiling on the number of votes. Members of two of those cooperatives have one vote per share of stock. In one, a member has a maximum of five votes and in the other, no member may cast more than 5 percent of all votes. The third cooperative gives members nine votes per share of stock, limits number of shares per member to 30, and thereby limits voting to 270 votes per member.

Other Voting Methods

Members of 15 cooperatives (6 in the sample and 9 in the top 120) vote by a method other than the three principal methods. As stated earlier, other methods usually were modifications or combinations of the 3 primary methods (one-member, one-vote; proportional based on patronage; and proportional based on equity capital). Modifications of one-member, one-vote voting included a cooperative in which each member could cast three votes and a cooperative allowing each member four votes. Two cooperatives stated that the number of votes depended on the number of directors being elected. Each member could cast one vote for each vacancy on the board of directors.

The following combinations of voting were reported; (1) one-member, one-vote and proportional based on patronage; (2)

one-member, one-vote and proportional based on equity capital; (3) one-member, one-vote and proportional based on patronage and equity; and, (4) proportional based on patronage and equity.

One-member, One-vote and Proportional Based on Patronage

Some cooperatives have more than one type or class of membership. A cooperative reported its Class A members vote on the basis of one-member, one-vote and Class B members vote according to patronage with the cooperative. Another cooperative indicated members are allowed one vote plus one vote for each "X volume of business" computed over a 3-year average. In three other cooperatives, members are allowed one vote plus one vote for each "X volume of business" in the most recent fiscal year only. One cooperative with the same system indicated there was a limit on number of votes per member but did not state the maximum number.

One-member, One-vote and Proportional Based on Equity Capital

A single cooperative stated that its members are allowed one vote plus one vote for each \$1 of equity capital.

One-Member, One-vote and Proportional Based on Patronage and Equity Capital

This method combines all three principal voting methods. Each member is allowed one vote, plus up to five additional votes according to that member's patronage with the cooperative, plus up to five additional votes depending on the member's equity capital in the cooperative. This, then, sets a maximum of 11 votes per member. It gives every member at least one vote, gives those who patronize the cooperative more in a recent period more voting power, and also gives members who may have built up equity in the cooperative over a long period of time more voting power. This method attempts to balance the concept of allowing all members to vote with the idea that control should rest with those who use the cooperative, both current larger users and smaller users who have patronized the cooperative over time.

Proportional Based on Patronage and Equity Capital

One cooperative gave members one vote for each X amount of patronage computed over the past 3 years plus one vote for each Y amount of equity in the cooperative. Another cooperative computed a member's proportion of patronage and proportion of

equity capital in the cooperative and the member voted on the basis of the lesser of the two.

Delegate Voting

Four cooperatives allowed delegates one vote for each member represented by that delegate. One cooperative did the same but limited each delegate to 200 votes. Delegates in another cooperative were allowed one vote for each 100 members in each county in the geographic area being represented.

Another cooperative allowed one delegate per 50 members per district. In that cooperative, delegates were allowed 7 votes (representing 350 members), or some number based on that district's proportion of business volume with the cooperative, whichever gives delegates the larger number of votes. Other cooperatives indicated delegates cast one vote per share of stock with stock distributed on the basis of patronage with the cooperative.

Voting by Districts

Cooperatives using districts were asked to explain the procedure for determining districts. Twelve cooperatives indicated their districts were based on some geographic factor. In seven cooperatives, districts were associated with States, counties, townships, or communities; three, with local associations or branches; and one, with judicial districts. Six cooperatives divided districts by other factors, by proportion of total production or volume handled. Two cooperatives divided their trade area into districts so each district had approximately an equal number of members or planted acreage.

District and at-large voting was combined in five associations. Members and delegates may vote by some combination of districts and at-large. Nominations for directors were made in nominating sessions, by petition, at annual meetings, by locals, or by districts. In five cases, nominations were made by locals or districts but members or delegates voted at-large. In other cases, members or delegates voted for nominees from their locals or districts only.

Summary And Conclusions

This study considered three primary questions about membership voting in agricultural cooperatives: (1) What method of voting is used? (2) Do members vote for directors or for delegates who represent them? (3) Do members vote at-large or by districts?

Of cooperatives responding to a survey, members of 92.6 percent of them vote on the basis of one-member, one-vote; 3.7 percent vote on the basis of the amount of business they have with the cooperative (proportional based on patronage); 2.6 percent vote based on their share of ownership (proportional based on equity capital) in the cooperative; and 1.1 percent vote under some modification or combination of the three previous methods. In respondent cooperatives from the top 120 group, members of 71.8 percent vote on the basis of one-member, one-vote; 12.7 percent, based on patronage; 7.3 percent, based on equity capital; and 8.2 percent, some modification or combination of the three previous methods. Thus, in the large majority of these cooperatives, each member had an equal number of votes or equal voting power.

In 99.3 percent of cooperatives in the sample that responded to the survey, members vote for directors rather than for delegates. For the top 120 group, the percentage of cooperatives in which members vote directly for directors was 74.3 percent. Again, in a large majority of these cooperatives, members have an opportunity to vote directly for directors rather than voting indirectly for them. Direct voting does not alter whatever voting power distribution results from the voting method used, whereas delegate voting may alter the voting power distribution.

Members vote at-large for directors in 85.1 percent of the respondent cooperatives in the sample. At-large voting was used in 35 percent of the cooperatives among those responding to the survey of the top 120. Cooperatives serving members in a larger geographic area tend to have districts more than do smaller ones. Thus, a larger majority of cooperatives in the sample but just over one-half of the cooperatives in the top 120 allow voting at-large. At-large voting does not alter the voting power distribution within each type of voting method.

The most common voting system among cooperatives in the sample (one-member, one-vote; direct; at-large) gives each member equal voting power. In the top 120 group, the most common system (one-member, one-vote; direct; districts) gives members within a district equal voting power but not necessarily equal voting power with members in other districts.

Other Publications Available

How to Start a Cooperative. CIR 7. 1965. 18 pp.

Cooperatives in Agribusiness. CIR 5. 1977. 57 pp.

Legal Phases of Farmer Cooperatives, Pt. I: Sample Legal Documents. Morrison Neely. Inf. 100. 1976. 40 pp.

Capper-Volstead Impact on Cooperative Structure. Joseph G. Knapp. Inf. 97. 1975. 48 pp.

Farmer Cooperative Directors: Characteristics, Attitudes. Gilbert W. Biggs. RR 44. 1978. 58 pp.

Measuring Co-op Directors. C.H. Kirkman. CIR 15. 1970. 12 pp.

Farmer Cooperative Publications CIR 4. 1977. 44 pp.

For copies, write Economics, Statistics, and Cooperatives Service,
U.S. Department of Agriculture, Room 550, GHI Building, 500
12th St., S.W., Washington, D.C. 20250.

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